	Application No.	Applicant(s)	
	10/774,661	MORITA, SHOJI	
Notice of Allowability	Examiner	Art Unit	
	Theresa Trieu	3748	
The MAILING DATE of this communication apperall claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI	(OR REMAINS) CLOSED in the or other appropriate communi GHTS. This application is sub-	nis application. If not includ cation will be mailed in due	ed course. THIS
1. This communication is responsive to			
2. 🔀 The allowed claim(s) is/are <u>1-20</u> .			
3. $igotimes$ The drawings filed on $\underline{10February2004}$ are accepted by the	ne Examiner.		
 4. Acknowledgment is made of a claim for foreign priority una) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 5. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give (a) including changes required by the Notice of Draftspers 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in the deposit of the decomposition of the deposit of the decomposition of the deposit of the decomposition of the decomposition of the deposit of the decomposition of the decom	been received. been received in Application cuments have been received in a polication of this communication to file a lENT of this application. itted. Note the attached EXAM as reason(s) why the oath or do to be submitted. son's Patent Drawing Review (as Amendment / Comment or in a length of the header according to 37 CFR sit of BIOLOGICAL MATER	No In this national stage application reply complying with the result. INER'S AMENDMENT or Neclaration is deficient. PTO-948) attached In the Office action of Indrawings in the front (not the 1.121(d). RIAL must be submitted.	quirements NOTICE OF
 Attachment(s) 1. Notice of References Cited (PTO-892) 2. Notice of Draftperson's Patent Drawing Review (PTO-948) 3. Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date Feb. 10, 2004 4. Examiner's Comment Regarding Requirement for Deposit of Biological Material 	6. ⊠ Interview Sum Paper No./M. 7. ⊠ Examiner's Ar	rmal Patent Application (PT nmary (PTO-413), ail Date mendment/Comment atement of Reasons for All Theresa Trieu Patent Examiner Art Unit: 3748	ŕ

EXAMINER'S AMENDMENT

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Thomas Bilodeau (Reg. No. 43,438) on August 19, 2004. During telephone conversation with Mr. Bilodeau, agreement was reached to amend specification. The application has been amended as follows:

Specification

- 1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
 - On page 9, line 16 "relieve valve 15" has been changed to --relief valve 15 --.
- On page 9, line 12, "relief valve 16" has been changed to --relief valve 15 --.

 The Amendment to the Specification has been entered to correct a typographical error.

Allowable Subject Matter

2. Claims 1-20 are allowed.

The following is an examiner's statement of reasons for allowance:

Regarding claims 1 and 7: the prior art fails to disclose or render obvious the claimed combination including: a seal land portion disposed between the maximum capacity position's side of the intake port and the minimum capacity position' side of the discharge port and sealing

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a communication between the intake and discharge ports via the pump chamber; a reduced portion defined between the communication port and the pump chamber; a bypass path connecting the communication portion with the discharge port; and a relief valve intervened in the bypass path opens the bypass with a pressure of the communication portion increased to or over a set pressure.

Regarding claim 16: the prior art fails to disclose or render obvious the claimed combination including: a seal land portion disposed between the maximum capacity position's side of the intake port and the minimum capacity position' side of the discharge port and sealing a communication between the intake and discharge ports via the pump chamber; a reduced portion defined between the communication port and the pump chamber; a bypass path connecting the communication portion with the discharge port; and a relief valve intervened in the bypass path opens the bypass with a pressure of the communication portion increased to or over a set pressure and a narrow portion fitted on an upstream side of the intake port, the narrow portion being set as to form a deviation point in a graph showing the speed of the drive shaft relative to a discharge flow rate.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Prior Art

The IDS (PTO-1449) filed on February 10, 2004 has been considered. An initialized copy is attached hereto.

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and consists of five patents.

Witchger (Patent Number 2,739,538) discloses a pumping unit with multiple intake ports.

Merz (Patent Number 4,443,169) discloses a gear pump providing with a choke bore at the inlet side of the pump and a series of outlet pressure bore.

Vaduz (Publication Number GB 1,016,722) discloses a compressor or pump of the rotary abutment type.

Kunimori (Publication Number JP 05-240166) discloses an internal gear pump.

Takeshi (Publication Number JP 05-263770) disclose an oil pump having a valve at the outlet port for controlling flow rate.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa Trieu whose telephone number is 703-308-6434. The examiner can normally be reached on Monday-Friday 8:30am- 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E Denion can be reached on 703-308-2623. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Theresa Trieu Patent Examiner Art Unit 3748